

REMARKS

Applicants appreciate the detailed examination evidenced by the Office Action mailed October 1, 2008 ("Office Action"), and more particularly, the indication that Claims 20-38 have been allowed. Applicants request reconsideration and withdrawal of the rejections of Claims 17, 18 and 39-43 for at least the reasons discussed below.

Independent Claim 17 is patentable

Independent Claim 17 stands rejected as allegedly obvious with respect to U.S. Patent No. 5,300,936 to Izadian ("Izadian"). Office Action, p. 2. Specifically, the Office Action states:

. . . Izadian does not disclose that, the rectangular conductor loop having the side substantially aligned with the edge of the rectangular ground plane; the monopole extends substantially perpendicular to the edge of the ground plane from a coupling point at the corner of the rectangular conductor loop at the edge of the ground plane.

However, this difference is not of patentable merit, since the conductor loop (26) of Izadia (sic) could be located into another position of ground-plane and the monopole (22) could be located into another position of ground-plane, therefore, to design the conductor loop (26) and the monopole (22) at the edge of the ground-plane upon a particular application or environment of use would have been deemed obvious to a person skilled in the art.

Office Action, pp. 2 and 3. Respectfully, this is an inadequate rationale to support a *prima facie* showing of obviousness.

To reach a proper determination under 35 U.S.C §103, impermissible hindsight must be avoided and the legal conclusion must be reached on the basis of the facts gleaned from the prior art. MPEP §2142. Applicants submit that there is no prior art evidence for the modification of the arrangement shown in Fig. 1 of Izadian (which the Office Action concedes does not correspond to Claim 17) proposed in the Office Action and that, in fact, this modification represents impermissible hindsight based on the Applicants' disclosure. In particular, the Office Action fails to provide any rationale as to how the prior art suggests making such a modification, for example, how the proposed modification would provide specific performance characteristics as explained in the disclosure of the present application. Just because components (e.g., a conductor loop, ground plane) *could* be rearranged as recited does not provide a rationale for arranging such components in the particular manner

recited in independent Claim 17 absent reasoning, ***based on prior art evidence***, as to why such an arrangement would have been predictable, for example, that such an arrangement would provide particular performance characteristics. The Office Action provides no such reasoning.

Moreover, the proposed modification of the assembly shown in Izadian would appear to fundamentally frustrate its intended operation. In particular, in the assembly shown in Figs. 1 and 2 of Izadian, the monopole 22 and the conductor loop 26 ***are not connected to one another***. In particular, they are separately connected to two different coax connectors 92 and 96. Modifying Izadian such that there is "a coupling point at a corner of the rectangular conductor loop" would require changing the connectivity of the elements described. This further teaches away from the modification of Izadian proposed in the Office Action.

In light of the foregoing, Applicants submit that the Office Action fails to make a *prima facie* showing of obviousness and, for at least these reasons, the rejection of independent Claim 17 should be withdrawn.

Independent Claim 39 is patentable

Claim 39 stands rejected as allegedly obvious based on a combination of Suguro and U.S. Patent No. 6,239,755 to Klemens et al. ("Klemens"). Final Action, p. 3. The Final Action alleges that Suguro teaches "commonly fed conductor loop (2) and monopole (14) and helical elements (see figure 4)." Final Action, p. 7. Suguro shows a flat antenna 40 including a patch-like conductor 2, which may be "substantially square" (see Suguro, column 4, lines 54 and 55) or a "triangular, pentagonal or circuit microstrip" (see Suguro, column 5, lines 25-28). There is no teaching or suggestion in Suguro that the item 2 is a "conductor loop." In addition, Suguro does not show a ***monopole*** sharing a common feed with any other type of antenna. Rather, Suguro shows a combination of patch and helical antennas, neither of which is a monopole. Accordingly, Suguro does not provide the teachings alleged in the Final Action, *i.e.*, Suguro does not teach "commonly fed conductor loop, monopole and helical elements," as recited in Claim 39. As Klemens does not provide such teachings, the cited combination of Suguro and Klemens does not disclose or suggest the recitations of Claim 39. For at least these reasons, Applicants submit that independent Claim 39 is patentable.

The dependent claims are patentable

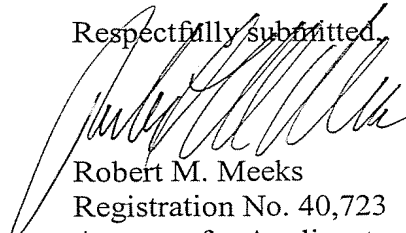
Applicants submit that dependent Claims 18 and 40-43 are patentable at least by virtue of the patentability of the respective ones of independent Claims 17 and 39 from which they depend. Applicants further submit that several of these dependent claims are separately patentable.

For example, in rejecting Claim 40, the Office Action alleges "Suguro discloses in figures 4-5, wherein the conductor loop (conductor (2)) has a reflective feature therein since the conductor loop is conductive or current can be drive it." Final Action, p. 4. Respectfully, the Office Action provides no evidence as to how "the conductive loop is conductive or current can be drive it" teaches "a reflective feature," and the Final Action fails to indicate what specific feature of the patch-like conductor 2 is allegedly "reflective." Accordingly, Applicants submit that Suguro does not provide the teachings alleged, and that the combination of Suguro and Klemens does not disclose or suggest the recitations of Claim 40. For at least these reasons, Applicants submit that Claim 40 is separately patentable. Similar reasons support the separate patentability of Claims 41 and 42.

Conclusion

Applicants submit that the claims are in condition for allowance, and respectfully request allowance of the claims and passing of the application to issue in due course. Applicants encourage the Examiner to contact Applicants' undersigned representative at (919) 854-1400 to resolve any remaining formal issues.

Respectfully submitted,



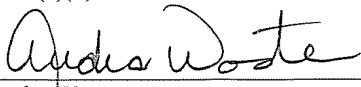
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